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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,161	07/24/2000	Yasuharu Iwaki	Q58742	5436

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EXAMINER	
NGUYEN, MADELEINE ANH VINH	
ART UNIT	**PAPER NUMBER**
2626	

DATE MAILED: 03/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/624,161	IWAKI, YASUHARU	
	Examiner	Art Unit	
	Madeleine AV Nguyen	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US Patent No. 6,442,293).

Concerning claim 1, Ito et al discloses an image processing apparatus (Fig.1) comprising an image correcting amount computing unit (102, 105) for computing a proper amount of image correction based on image data of an image of an original delivered from an image input unit (4, 6); an image processing unit (104) for performing image processing based on the proper amount of image correction computed by the image correcting unit to produce a processed image; and a display unit (5) for monitoring the processed image obtained by the image processing unit; wherein the proper amount of image correction automatically computed by the image correcting amount computing unit is evaluated for a range of correctness and a warning is given based on the result of the evaluation (Figs.4-6, 12, 14-15; Abstract; col. 5, line 3 – col. 19; col. 7, lines 28-67; col. 8, line 41 – col. 9, line 65).

Ito does not directly teach that the proper amount of image correction is evaluated for a degree of correctness and a warning is given when the degree of correctness is low. However, Ito teaches that "the ortho-image forming section 103 can include a function of discriminately

displaying a non-overlapped area/non-photographed area determined by the ortho-image correcting section 104 or a shortage/failed positioning of the control points/orienting points on the display screen of the ortho-image." (col. 6, lines 21-30); "the ortho-image correcting section 104 can form, if a plurality of centrally projected images are obtained, an orthogonally projected image by combining images selected according to a proper standard, e.g. images of places having specified/lower reduction scales or having relatively small reduction scales, alternatively images close to the measuring point or the control point, on priority basis." (col. 6, lines 31-47); "the ortho-image correcting section 104 determines, based on the ortho-image formed by the ortho-image forming section 103, necessity of changing a photographing position/orienting points... the determining function includes a function of determining a shortage/failed positioning of control points/orienting points includes in a portion overlapped by at least two stereo images in the ortho-image." (col. 6, lines 48-67). It would have been obvious to one skilled in the art to consider Ito teaches that the proper amount of image correction is evaluated for a degree of correctness and a warning is given when the degree of correctness is low since the ortho-image correcting section corrects the image based on a range of condition of correctness (degree of correctness) calculated by the coordinate transformation parameter calculating section 102 and the additional image measuring section 105 and a warning is displayed when there is improper area or condition of the image is detected (or when the degree of correctness is low).

Concerning claims 2, Ito further teaches that the image input unit is an image reading unit (CCD), a readout unit for reading out the image data from a digital camera or an image data recording medium or a communication unit for downloading the image data via communication (claim 2), (col. 5, lines 6-7, lines 26-38); the images other than the failure image are not

displayed on a verification screen in the display unit (claim 5), (S609, Fig.12; S707, Fig.14; Fig.15); for the failure image, each image is based on the proper amount of image correction in each of at least two of the different directions is displayed on the display unit to ask for the operator's instruction for selection (claims 6, 9), (Figs.14-15; col. 5, lines 31-38; col. 17, lines 17-41); an image storage unit (2, Fig.1) for storing processed image or failure images (claims 7, 10, 11), (col. 5, lines 26-52); images other than the image for which the warning is given are not displayed on a verification screen in the display unit (claim 8), (Fig.15; col. 17, lines 17-21); a unit (5, 6) for outputting the processed image obtained by the image processing unit to an external unit as the image data.

Concerning claim 3, Ito further teaches the warning belongs to a group of images in which correction is performed in different directions for the proper amount of image correction, and the image processing apparatus further including a unit (5, 6) in which an operator performs an input operation for verifying the image belonging to the group of the images in which the correction is performed in the different directions for the proper amount of image correction (col. 6, lines 17-67; col. 7, lines 36-67; col. 8, line 55 – col. 26; col. 16, lines 40-67; col. 17, lines 22-37).

It is noted that although Ito does not directly mention that the display section 5 and the input section 6 are verification units, but Ito teaches that "the confirmation of the display screen by a measuring operator" (col. 9, lines 7-8), "the decision as to necessity of re-photographing based on the results of checking, and the decision as to the step to which the process returns when re-photographing is necessary, may be manually made by the operator based on the display screen" (col. 9, line 66 – col. 10, line 5), and "any operator can form an ortho-image while easily

performing complementary measuring" (col. 20, lines 1-5). It would have been obvious to one skilled in the art to consider the display section 5 and the input section 6 are verification units since the operator can check the result from the display screen and performs an input operation through the input section 6 for verifying the images.

Concerning claims 13-4, Ito discloses an image processing apparatus as discussed in claims 1-3 above.

Claim 15 is method claims of apparatus claims 1-3. Claim 15 is rejected for the same rationales set forth for claims 1-3.

3. Claims 4, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al as applied to claim 1 above, and further in view of Tanaka et al (US Patent No. 6,630,958).

Concerning claims 4 and 16, Ito further teaches the image for which the correction is performed in the different directions for the proper amount of image correction is a failure image and the group of the images in which the correction is performed is group that contains images taken with defects.

Ito fails to go to details that the defects are unusual types of light sources, color failure, images taken with backlight or electronic flash. However, it was commonly known in the art that the images taken from a digital camera could have some defects as discussed above. Tanaka et al disclose a digital camera connecting to a computer for correcting the image data wherein images are images taken with different light sources, backlight or electronic flash (Fig.711, 12, 20, 22, 23; col. 5, lines 21-57; col. 11, lines 36-57; col. 15, lines 20-48). It would have been obvious to one skilled in the art to combine the teaching of Tanaka et al to the system in Ito et al

since the system in Ito connect to a plurality of different digital cameras or input devices that provide images for processing wherein images taken from digital cameras can include failure image with unusual types of light source, backlight and electronic flash.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Takayama et al (US Patent No. 6,683,643) discloses an electronic camera capable of detecting defective pixel in image data.

b. Nakamura et al (US Patent No. 6,151,464) teaches an image output processing apparatus is capable of controlling print jobs with a display for warning any defect.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Madeleine AV Nguyen
Primary Examiner
Art Unit 2626

March 18, 2004